

20-8776/20-8777



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

500-302051-001
Job Sheet 210427



Part No: 500-302051-001

Job Qty: 3 ea

Part Name: Pin, Strut Mount



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 6/9/20

Job Tracking No:

Due Date: 7/3/20

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: 500-302051 REV IR IPP REV:A NEW ISSUE 20-06-09 JLM VERIFIED BY:DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	SL-154 - 1	3 pcs	7/3/20		0.50	1.00	Doosan - 1		
							NLX 2500SY - 1		DAS
							SL-154 - 1		33 20/06/17
							SL-2500Y - 1		9-89
110	QC 2	3 pcs	7/3/20		0.00	0.00	QC 2 - 1		
							QC 2 - 12		
							QC 2 - 14		
							QC 2 - 17		
							QC 2 - 19		
							QC 2 - 2		
							QC 2 - 20		
							QC 2 - 22		
							QC 2 - 23		
							QC 2 - 25		
							QC 2 - 32		
							QC 2 - 33		DAS
							QC 2 - 35		33 20/06/17
							QC 2 - 39		9-89
							QC 2 - 4		
							QC 2 - 40		
							QC 2 - 44		
							QC 2 - 45		
							QC 2 - 48		
							QC 2 - 49		
							QC 2 - 50		
							QC 2 - 51		
							QC 2 - 52		
							QC 2 - 57		
							QC 2 - 62		
							QC 2 - 63		
							QC 2 - 8		



Container No: S283390



Part: 500-302051-001

Job No: 210427

Serial No/Batch: S283390

Revision: REV IR

Inspector:

Exp Date:

Instructions:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL.: 1 813 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 06/17/20

120 QC 8	3 pcs	7/3/20	0.00 0.00	QC 2 - 66	
				QC 2 - 64	
				QC 2 - 65	
				QC 2 - 5	
				QC 2 - 71	
				QC 2 - 73	
				QC 2 - 69	
				QC 2 - 76	
				QC 2 - 86	
				QC 2 - 83	
				QC 8 - 12	
				QC 8 - 14	7/20/20
				QC 8 - 17	
				QC 8 - 20	
				QC 8 - 25	
				QC 8 - 3	
				QC 8 - 32	
				QC 8 - 33	
				QC 8 - 35	
				QC 8 - 39	
				QC 8 - 4	
				QC 8 - 44	
				QC 8 - 45	
				QC 8 - 49	
				QC 8 - 58	
				QC 8 - 8	
				QC 8 - 9	
				QC 8 - 68	
				QC 8 - 67	
				QC 8 - 1 (A)	
				QC 8 - 47	
				QC 8 - 40	
				QC 8 - 52	
				QC 8 - 23	
				QC 8 - 57	
				QC 8 - 76	
				QC 8 - 61	
				QC 8 - 66	
				QC 8 - 73	
				QC 8 - 82	
130 Outsource - 6 - Polish	3 pcs	7/3/20	0.00 0.00	GR0002	7/20/20-06-25
135 Packaging 2-1 - Receive - B4B	3 pcs	7/3/20	0.00 0.00	Packaging 2 - 1 - B4B	
				Packaging 2 - 2 - B4B	
				Packaging 2 - 3 - B4B	
				Packaging 2 - 5 - B4B	
				Packaging 2 - 4 - B4B	
				Packaging 2 - 6 - B4B	
				Packaging 2 - 7 - B4B	
				Packaging 2 - 8 - B4B	
				Packaging 2 - 9 - B4B	
				Packaging 2 - 10 - B4B	
				Packaging 2 - 11 - B4B	
				Packaging 2 - 12 - B4B	
				Packaging 2 - 13 - B4B	
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				Packaging 2 - 18 - B4B	

				Packaging 2 - 19 - B4B	
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				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
				Packaging 2 - 37 - B4B	
140	QC 6	3 pcs	7/3/20	0.00 0.00	QC 6 - 9
 FAIR REQ'D SEE QA				QC 6 - 68	DAS
				QC 6 - 61	82
				QC 6 - 40	9-89
				QC 6 - 81	
				QC 6 - 82	JUL 16 2020
150	Packaging 3-1 - Stock - B4B	3 pcs	7/3/20	0.00 0.00	Packaging 3 - 1 - B4B
					Packaging 3 - 2 - B4B
					Packaging 3 - 3 - B4B
					Packaging 3 - 4 - B4B
					Packaging 3 - 5 - B4B
					Packaging 3 - 6 - B4B
					Packaging 3 - 7 - B4B
					Packaging 3 - 8 - B4B
					Packaging 3 - 9 - B4B
					Packaging 3 - 10 - B4B
					Packaging 3 - 11 - B4B
					Packaging 3 - 12 - B4B
					Packaging 3 - 13 - B4B
					Packaging 3 - 14 - B4B
					Packaging 3 - 15 - B4B
					Packaging 3 - 16 - B4B
					Packaging 3 - 17 - B4B
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					Packaging 3 - 31 - B4B
					Packaging 3 - 32 - B4B
					Packaging 3 - 33 - B4B
					Packaging 3 - 34 - B4B

				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
				Packaging 3 - 37 - B4B	
160	QC21-SA	3 Ea	7/3/20	0.00 0.00	QC 21 - SA - 21
Part Op 100 - Verify material spec with QC Turn as per dwg 500-302051 1-Machine as per folio F <u>D308</u> 9-15 *Descriptions: <u>AA</u> DWG REV: <u>1R</u> 2-Debur 110 - QC2- Inspect parts off machine FAI/FAIB 120 - QC8- Inspect parts - second check 130 - ISSUE PO: <u>40647</u> Electropolish as per ASTM B912 Material: AISI 17-4PH H1150 -Certificate of Conformity is required 135 - Receive & Inspect for Damage & Mat'l Certs 140 - QC6- All purchased or subcontracted products 150 - Identify as per dwg & Stock 160 - QC21- Final Inspection - Work Order Release					DAS 21 JUL 17 2020
Job BOM					
Part / Item	Component Name	Quantity	Operation	Container	
M17-4-H1150-R0.625	17-4 SS Round Bar H1150 0.625" dia.	.7200 ft (.24 ea)	100-SL-154 - 1	<u>5059635</u>	
Job Allocations					
Operation	Component Part	Required	Inventory	Allocated	
100-SL-154 - 1	M17-4-H1150-R0.625	1	12	0	
Part Specifications					
Specifications could not be found.					

Plex 6/9/20 1:01 PM Dart.lajeunesse.marie

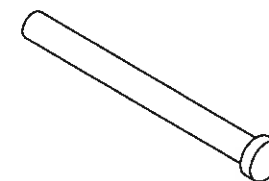
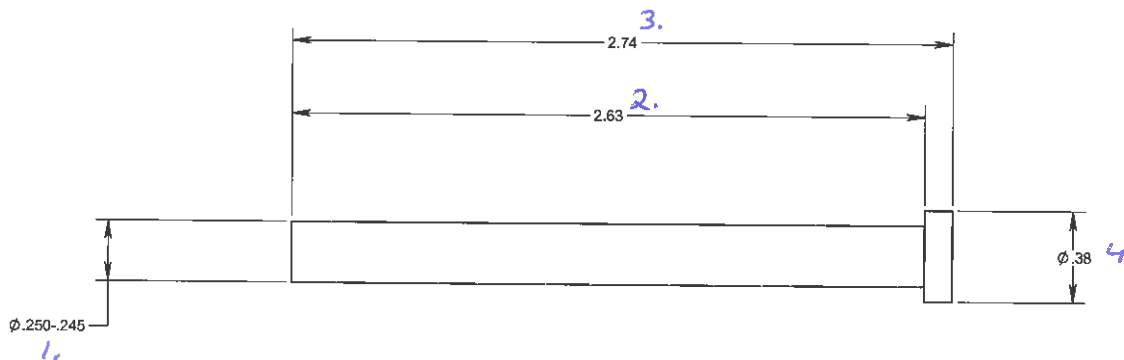
INSPECTION SHEET

Engineering Approval: (If necessary)		Date:	
Rev	Date	Change	Revised by
B	14.07.31	New Issue	KJ
			Approved

PROPRIETARY AND CONFIDENTIAL
THIS DOCUMENT CONTAINS PROPRIETARY AND
CONFIDENTIAL INFORMATION THAT IS THE SOLE
PROPERTY OF SIMPLEX MANUFACTURING CO.
ANY DISCLOSURE IN PART OR AS A WHOLE TO
ANY UNAUTHORIZED PERSON IS SPECIFICALLY
PROHIBITED.

NEXT ASSEMBLY	PROJECT	REVISIONS			
500-302000-301	500 VARIOUS	REV.	DESCRIPTION	REV BY	DATE
				APPV	

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 216477 MJS
200609



500-302051-001,
PIN, STRUT MOUNT

NOTE:

- ① HEAT TREAT TO CONDITION H1150 IAW AMS2759/3
MINIMUM HARDNESS HB 277-352 (HRC 28-37).
NO ADDITIONAL TENSILE TESTS REQUIRED IF THE MATERIAL
CERTIFICATION QUALIFIES THROUGH TEST THAT THE MATERIAL
CAPABILITY MEETS THE MINIMUM PERFORMANCE REQUIREMENTS
PER AMS 5604/5643 AT THE H900 CONDITION.

- DO NOT SCALE DRAWING - UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES REMOVE ALL BURRS & BREAK SHARP EDGES				SIGNATURE		DATE	
TOLERANCES				DRAWN BY: D KRUTHOFF		DATE: 8/1/13	
				CHECKED BY: O WRIGHT		DATE: 2/12/14	
MACHINE FINISH 63				PRODUCTION CONTROL: J RODRIGUEZ		DATE: 2/11/14	
				ENGINEER APPROVAL: D CORNELIUS		DATE: 2/12/14	
MATERIAL AISI 17-4PH, H1150, PER AMS 5643				ESTIMATED WEIGHT: 0.005 Lbs		SIZE: B	
FINISH ELECTROPOLISH PER ASTM B912				DRAWING NUMBER: 500-302051		SCALE: 1:1	
TITLE PIN, STRUT MOUNT						DRAWING NO. 500-302051	
						REV IR	



SIMPLEX
Austrian Machine Equipment

13340 N.E. Whitaker Way
Portland, Oregon 97230
Ph. 503.257.3511

ET-001-A

3/28/2018

PURCHASE ORDER



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

PO039413

Supplier: ACI001-VC
Acier Ouellette Inc.
935 Boul. Du Havre
Valleyfield
QC
J6S 5L1 Canada
Phone: 800 667 4248
Fax: 450 377 5696

PO No: PO039413**PO Date:** 3/23/18**Due Date:** 4/3/18**Purchase Order****Revision:****Revision Date:**

Ship-To Contact: Lavoie, Chantal
clavoie@dartaero.com

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

Via: Ground**Pynt Terms:** Net 30**Freight Terms:****Special Comments:** QUOTE NO SQU0093847

REVISED

Items										
Line Item	Part	Supplier Part No	Description	Status	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	MT-4140-S-0.500X10.000		AISI 4140 Steel Sheet/Plate as per ASTM A829 OR AMS 6395	Firmed	4/3/18	6.667 sf	0 sf	7 sf	\$58.217082/sf	\$388.13
Line Item Note: 1 pcs of 10" x 96" 28-32 rc										
2	M1018E1.000X03.000		1010-1025 Steel Bar 1.000 X 3.000 : MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A569/A570 OR OR CSA G40-21 38W/44W/50W/60W/70W CSA G40-21 OR 38W/44W/50W/60W/70W	Firmed	4/3/18	12 ft	0 ft	12 ft	\$10.80666/ft	\$129.68
3	M6061T6S.090		6061-T6 .090 Shee : MATERIAL: 6061-T6/T62 ALUMINUM SHEET AS PER QQ-A-250/11 OR AMS-QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209 receive sf	Firmed	4/3/18	96 sf	0 sf	96 sf	\$6.358125/sf	\$610.38
4	M303R0.625		303 Round Bar 0.625" : MATERIAL: AISI 303 SS ROUND BAR AS PER ASTM A582 NOTE: 304/316 NOT ACCEPTABLE receive ft	Firmed	4/3/18	12 ft	0 ft	12 ft	\$4.13333/ft	\$49.60
5	M304R0.375		304 Round Bar 0.375 : MATERIAL: AISI 304/316 SS ROUND BAR AS PER ASTM A276 NOTE: AISI 303 NOT ACCEPTABLE receive ft	Firmed	4/3/18	12 ft	0 ft	12 ft	\$1.188/ft	\$14.26

Plex 3/28/18 1:56 PM dart.lavoie.chantal



DELIVERY - CLIENT

CO00080257

ACIER OUELLETTE INC.

935, Boul. du Havre
Salaberry de Valleyfield (Québec) J6S 5L1
Tél.: 450-377-4248 Mtl: 514-336-4248 Ext.: 800-667-4248
Fax: 450-377-5696 Mtl: 514-336-4246 Ext.: 866-456-4242

Customer N° CLI0001056
Date 2018/03/23
Delivery date **2018/04/09**
Your order N° 039413
Processed by Josianne Bourdon
Salesman
Carrier OUELLETTE VALLEYFIELD
Credit Terms Net 30 Days
Page 1

Billed to
DART AEROSPACE LTD

1270 , ABERDEEN ST.
HAWKESBURY, Ontario, K6A 1K7

Shipped to

, Ontario,

Att : CHANTAL LAVOIE Tél.: 613-632-5200

Instruction F-M

Delivery Route 5

Product Description	Weight	Qty	U/M	PCS NB			Internal Use Only				
				CND	EXP	B/C	IN	I	S	C	OUT
1 PLATE 4140 HEAT TREAT 1/2 NS P4140-12H 8509 1 X 10" X 96" 28/32 RC LINE 1 AC14644-FU-04/04 heat # 300188	136.20	6.67	PI2_\$CLB		10 X 96"		8'				DAS 11 3-89 APR 10 2018
2 ROUND SS 5/8 1/4 H1150 RSS-58174 10309 1 X 12" R/L LINE 8 AC14646-JG-06/04 EAT # SH0767-G102	12.52	12.00	PI_\$CLB		12"		12'				DAS 11 3-89 APR 10 2018
3 PLATE 4140 HEAT TREAT 3/8 NS P4140-38H 8806 1 X 5 1/2" X 72" LINE 14 AC14644-FU-04/04	42.10	2.75	PI2_\$CLB		5 1/2 X 72"		6'				DAS 11 3-89 APR 10 2018

NIR : R-109516-6

Next Page...

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

Certification Date
5-APR-2018

AC00014646
PART NUMBER/NUMÉRO DE PIÈCE
510436

Invoice Number
T377934

SOLD TO: ACIER OUELLETTE INC. SHIP TO: ACIER OUELLETTE INC.
VENDU À: DIVISION SALABERRY DE VALLEYFIELD DIVISION SALABERRY DE VALLEYFIELD
935, BOUL. DU HAVRE 935, BOUL. DU HAVRE
SALABERRY-DE- VALLEYFIELD QC J6S 5L1 SALABERRY-DE- VALLEYFIE QC J6S

Description: 17-4 CF BAR COND H1150 ASTM A564
3/8 RD X 12 LAL Line Total: 12 LBS
HEAT: SH0767-9102 ITEM: 510436

Specifications:

AMS 5643 U ASTM A564 T630 13 ASME SA564 T630 13
ASTM A388/A388M 16A EN 10204 3.1 ASTM E340
AMS 2315 ASTM E112

CHEMICAL ANALYSIS

C	SI	MN	P	S	NI	CR	MO
0.02	0.45	0.65	0.027	0.001	4.27	15.25	0.21
CU	NBTA	NB	TA				
3.39	0.21	0.21	0.0036				

RCPT: R388512

COUNTRY OF ORIGIN : TAIWAN

MECHANICAL PROPERTIES

DESCRIPTION	YLD STR KSI	ULT TEN KSI	%ELONG IN 02 IN	%RED IN AREA	HARDNESS RC
COND H1150	129.0	144.0	20.0	73.0	32

GRAIN SIZE : 8 -

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with mercury while in our possession. Par les présentes, nous certifions que le matériel couvert par ce rapport n'a rencontré les spécifications décrites ci-haut.

Joanne Despres

MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

CUSTOMER ORDER NUMBER
NUMÉRO DE COMMANDE DU CLIENT

AC00014646

PART NUMBER/NUMÉRO DE PIÈCE
510436

Certification Date
5-APR-2018

Invoice Number
T377934

SOLD TO:	ACIER OUELLETTE INC.	EXPÉDIE À:	ACIER OUELLETTE INC.
VENDU À:	DIVISION SALABERRY DE VALLEYFIELD		DIVISION SALABERRY DE VALLEYFIELD
	935, BOUL. DU HAVRE		935, BOUL. DU HAVRE
	SALABERRY-DE- VALLEYFIELD QC J6S 5L1		SALABERRY-DE- VALLEYFIE QC J6S

Description: 17-4 CF BAR COND H1150
5/8 RD X 12' R/L

ASTM A564
Line Total: 12 LB

REMARK: SH0767-G102 ITEM: 510436

MATERIAL IS FREE FROM MERCURY CONTAMINATION
NO WELD REPAIR PERFORMED ON MATERIAL

ULTRASONIC: YES

THERMAL TREATMENT: OK

SOLUTION TREATMETN: 1900 +/-25 DEG F X 30 MIN/INCH

(MINIMUM OF 1/2 HOUR), FAST COOLED TO BELOW 90 DEG F

PRECIPITATION TREATMETN: 1150 +/-10 DEG F FOR 4 HOURS

MINIMUM AND AIR COOLED.

MACRO: OK

MICRO1:

MICRO CONTAINS NO MORE THAN 5% FERRITE

COMMENTS

red.r atio 537.1:1

api 6a, appendix m

17-4 h1150 is the same with aisi 630 h1150

The above data were transcribed from the manufacturer's Certificate of Test after verification for completeness and specification requirements of the information on the certificate. All test results remain on file subject to examination. /Les informations ci-haut-mentionnées sont transcrites du certificat d'essais du manufacturier après vérification de l'état complet des spécifications inscrites sur le certificat. We hereby certify that the material covered by this report will meet the applicable requirements described herein, including any specification forming a part of the description. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

The willful recording of false, fictitious, or fraudulent statements in connection with test results may be punishable as a felony under federal statutes. /Les informations fausses, fictives ou frauduleuses en rapport avec le résultat des essais sont punissables en vertu des lois fédérales.

Material did not come in contact with any corrosive media in our possession. /Par les présentes, nous certifions que le matériel couvert par ce rapport rencontre les spécifications décrites ci-haut.

Joanne Despres

MANAGER QUALITY ASSURANCE
GÉRANT DE L'ASSURANCE QUALITÉ

MATERIAL RECEIPT INSPECTION FORM

MATERIAL: M17-4-H150-R0.625

PO / BATCH NO.: 039413/508635

DATE: APR 10 2018

MATERIAL CERT REC'D: YES
 QUANTITY RECEIVED: 12
 QUANTITY INSPECTED: 12
 QUANTITY REJECTED: 0

THICKNESS ORDERED: 0.625
 THICKNESS RECEIVED: 0.625
 SHEET SIZE ORDERED: N/A
 SHEET SIZE RECEIVED: N/A

DESCRIPTION	NCR (Check Y/N)	COMMENTS
SURFACE DAMAGE	Y (N)	
CORRECT FINISH	Y (N)	
CORROSION	Y (N)	
CORRECT GRAIN DIRECTION	Y (N)	
CORRECT MATERIAL PER M-DRAWING	Y (N)	AmS 5643
CORRECT THICKNESS	Y (N)	
PHOTO REQUIRED	Y (N)	
CORRECT REF # TO LINK CERT	Y (N)	10-17-510-26-6-102
CORRECT MATERIAL IDENTIFICATION	Y (N)	
CORRECT M# ON THE MATERIAL	Y (N)	
DOES THIS MATERIAL REQUIRE ENGINEERING SIGN OFF	Y (N)	
DOES THIS REQUIRE AN EXTRUSION REPORT	Y (N)	

CUT SAMPLE PIECE OF MATERIAL AND PERFORM A HARDNESS CHECK. RECORD RESULTS BELOW					
	HRC	HRB	DUR A	DUR D	WEBSTER
TYPE OF MATERIAL					
SIZE OF TEST SAMPLE					
HARDNESS / DUROMETER READING					

Testers located in the Quality Office

QC 18 INSPECTION		ENGINEERING SIGNOFF (if required)	
INSPECTED BY: <u>DAS 11</u>	SIGNED OFF BY: _____		
DATE: <u>8-99 APR 10 2018</u>	DATE: _____		

Attach this inspection sheet with the corresponding material cert and remit to be scanned and received in

SPECIFICATION CONTROL DRAWING

△ PURCHASE MATERIAL: 17-4 PH / S17400 / TYPE 630 SS ROUND BAR
GRAIN MUST BE ALONG LENGTH OF BAR
MINIMUM YIELD STRENGTH PER TABLE
MINIMUM ULTIMATE STRENGTH PER TABLE

△ SPECIFICATION: AMS 5843 OR ASTM A584

△ PART NUMBER: M17-4- HHHH-H- R X.XXX WHERE: HHHH SPECIFIES THE MATERIAL CONDITION (PER TABLE BELG/W)
COND O.D. X.XXX = DIAMETER (IN INCHES)

△ MATERIAL CONDITION TABLE:

COND	CONDITION	MIN YIELD TENSILE STRENGTH (KSI)	MIN ULTIMATE TENSILE STRENGTH (KSI)
(OMITTED)	NONE SPECIFIED (CONDITION A NOT ACCEPTABLE)	100	150
H900	H900	170	190
H925	H925	185	170
H1025	H1025	135	155
H1075	H1075	125	145
H1100	H1100	115	140
H1150	H1150	105	135
CONDA	CONDITION A (SOLUTION TREATED)		

NOTES: MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR
TENSION OR SHEAR APPLICATIONS IN COLD WEATHER CONDITIONS

MATERIAL IN H900 AND H925 CONDITION NOT RECOMMENDED FOR
APPLICATIONS WHERE STRESS CORROSION CRACKING IS POSSIBLE

CONDITION A NOT TO BE USED IN DESIGN FOR FINAL PRODUCT AND
SHOULD ALWAYS BE HEAT TREATED

△ EXAMPLES:

PART	PART NUMBER
4.00" DIAMETER BAR MIN UTS = 150 KSI, MIN YTS = 100 KSI	M17-4-R4.000
2.500" DIAMETER BAR H900 CONDITION	M17-4-H900-R2.500
3.250" DIAMETER BAR H1025 CONDITION	M17-4-H1025-R3.250
0.750" DIAMETER BAR A CONDITION	M17-4-CONDA-R0.750

RELEASED
11 207-10-31
E117-728

APPROVED

C	ADDED MATERIAL CONDITION (C9K17 157)	NO	17.09.14
B	REFORMAT DWG, S17400 TYPE 630 ADDL. TO F JRC. BASE MATERIAL (2N D8-1. ADD A584 SPLC (28-1) REF PAR 0A-320A	VS	10.03.20
A	NEW ISSUE	CP	05.03.16
REV	DESCRIPTION	BY	DATE
DESIGN	NO		
DRAWN	NO		
CHECKED	CP		
MFG APPR.	RA		
APPROVED	WM		
DE APPR.	CP		
DATE	17.09.14		

DART AEROSPACE LTD
HAMPSHIRE, ONTARIO, CANADA

DRAWING NO. **M17-4-R**

REV. C

SHEET 1 OF 1

SCALE: NTS

17-4 SS ROUND BAR



Certificat de Conformité / Certificate of Compliance

(029256-1)

2455, Rue Halpern | Saint-Laurent | Québec | H4S 1N9
 Tel: 514-335-3666 Fax: 514-335-3868
 www.groupealtech.com

Bon de Livraison / Packing Slip

029256-1

Livré à / Ship to

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 Tel.: 613-632-5200 Fax.:

Client / Customer:

DART AEROSPACE LTD
 1270 ABERDEEN STREET
 HAWKESBURY, ON, K6A1K7
 CANADA
 BUYER:

Date expédition Ship date		Créé Par Generated By		Transport / No de Compte Courier / Acc. No.		Bon de commande Client Customer Purchase Order No.			
02-Jul-2020		Lorena Vargas				POHB046647			
#Ligne Line#	No. de Série / # Pièce Part Number / Line Item Details Job # / Ref #	Description pièce(s)		CATG. U/M	Comm. /Ordered	Exp/ Shipped	Qté NC/ NC Qty	Qté Scrap/	À venir/ Back Order
1	500-302050-001 Rev.	500-302050-001 ELECTRO POLISH AS PER ASTM B912		ELECTROPOLISH CH	6	6	0	0	0
2	500-302074-001 Rev.	500-302074-001 01-ELECTROPOLISHING [ELECTROPOLISHING] AS PER ASTM B912		ELECTROPOLISH CH	3	3	0	0	0
3	500-302075-001 Rev.	500-302075-001 01-ELECTROPOLISHING [ELECTROPOLISHING] AS PER ASTM B912		ELECTROPOLISH CH	6	6	0	0	0
4	500-302051-001 Rev.	500-302051-001 01-ELECTROPOLISHING [ELECTROPOLISHING] AS PER ASTM B912		ELECTROPOLISH CH	3	3	0	0	0

DAS
82
9-89

RECEIVED
JUL 10 2020
DART AEROSPACE LTD.

DAS
82
9-89

RECEIVED
JUL 02 2020
DART AEROSPACE LTD.

Notes Additionnelles / Additional Notes

Epaisseur réelle
Actual Thickness

Inspecteur Qualité
Quality Inspector

Réçu par
Received By

Nous certifions que les pièces énumérées ci-dessus ont été traitées en conformité avec votre commande et vos spécifications et rencontrent les exigences.
 Notre responsabilité financière et légale ne sera pas supérieure au montant de la facture issue.

We hereby certify that the parts listed above have been process in accordance with your purchase order and specifications and are in conformance with your requirements.
 Our financial and legal responsibility will not be higher than the amount of invoice.



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER

POHB046647



Supplier: GRO002-VC
Group Altech
2455 Halpern
St Laurent
QC
H4S 1N9 Canada
Phone: 514-335-3666
Fax: 514-335-3868

Attention: Grenon, Sylvie

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB046647

PO Date: 6/25/20

Due Date: 7/2/20

Purchase Order

Revision:

Revision Date:

Issued By: Guerin, Kimberley
Phone: 613-632-5200 Ext: 298
kguerin@dartaero.com

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments:

E-MAILED
2020-06-26

Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	210793	500-302050-001	500-302050 REV IR	Link, Chain Adjuster ISSUE PO: Electropolish as per ASTM B912 Material: AISI 17-4PH H900 -Certificate of Conformity is required	Firmed	-	7/2/20	6 pcs	0 pcs	6 pcs	\$9.7222/pcs	\$58.33
2	210431	500-302074-001	500-302074 Rev IR	Pin Retainer Long ISSUE PO: Electropolish as per ASTM B912 Material: AISI 17-4PH AMS 5643 -Certificate of Conformity is required	Firmed	-	7/2/20	3 pcs	0 pcs	3 pcs	\$9.7222/pcs	\$29.17
3	210432	500-302075-001	500-302075 REV IR	Pin Retainer Short ISSUE PO: Electropolish as per ASTM B912 Material: AISI 17-4PH AMS 5643 -Certificate of Conformity is required	Firmed	-	7/2/20	6 pcs	0 pcs	6 pcs	\$9.7222/pcs	\$58.33



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
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PURCHASE ORDER

POHB046647



Items

Line Item	Job	Part	Drawing	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
4	210427	500-302051-001	500-302051 REV IR	Pin, Strut Mount ISSUE PO: Electropolish as per ASTM B912 Material: AISI 17-4PH H1150 Certificate of Conformity is required	Firmed X3	-	7/2/20	3 pcs	0 pcs	3 pcs	\$9.7222/pcs	\$29.17

Grand Total: \$175.00

Order Notes

Procurement Quality Clauses
A005 right of entry
A012 chemical and physical test report
A016 personnel qualification
A017 raw material identification (as applicable)

A022 Apical Processing
A024 process certifications
A026 certification of material conformance

A041 quality management system
A042 dart notification by supplier
A043 retention of quality documents

A048 counterfeit parts avoidance, detection, mitigation and disposition program

A049 supplier awareness

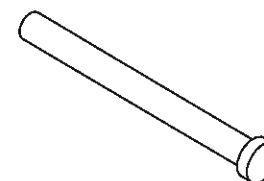
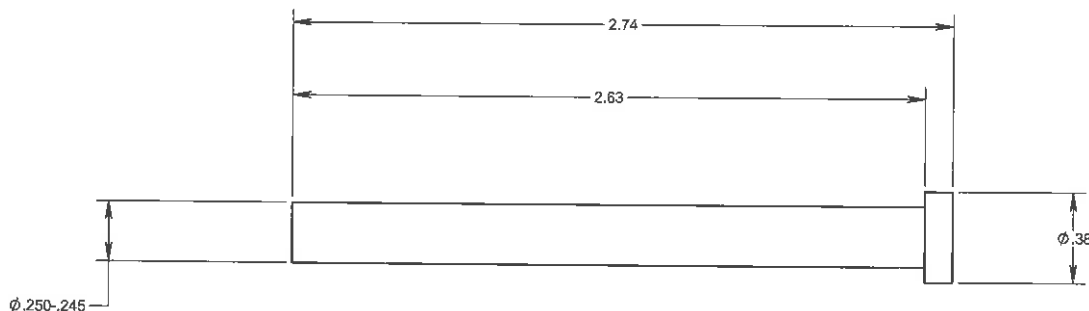
Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Guerin

Plex 6/26/20 3:21 PM Dart.Guerin.Kimberley

PROPRIETARY AND CONFIDENTIAL
THIS DOCUMENT CONTAINS PROPRIETARY AND
CONFIDENTIAL INFORMATION THAT IS THE SOLE
PROPERTY OF SIMPLEX MANUFACTURING CO.
ANY DISCLOSURE IN PART OR AS A WHOLE TO
ANY UNAUTHORIZED PERSON IS SPECIFICALLY
PROHIBITED.

NEXT ASSEMBLY		PROJECT		REVISIONS			
500-302000-301		500 VARIOUS		REV.	DESCRIPTION	REV BY	DATE
							APPV



500-302051-001,
PIN, STRUT MOUNT

NOTE:

1. HEAT TREAT TO CONDITION H1150 IAW AMS2759/3.
MINIMUM HARDNESS HB 277-352 (HRC 28-37).
NO ADDITIONAL TENSILE TESTS REQUIRED IF THE MATERIAL
CERTIFICATION QUALIFIES THROUGH TEST THAT THE MATERIAL
CAPABILITY MEETS THE MINIMUM PERFORMANCE REQUIREMENTS
PER AMS 5604/5843 AT THE H900 CONDITION.

DO NOT SCALE DRAWING UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES REMOVE ALL BURRS & BREAK SHARP EDGES				SIGNATURE		DATE	
TOLERANCES				DRAWN BY: D KRUTHOFF		DATE: 8/1/13	
MACHINE FINISH 83/				DESIGNED BY: D WRIGHT		DATE: 2/12/14	
ANGLES: X ± 1° XX ± 0.5°				PRODUCTION CONTROL: J RODRIGUEZ		DATE: 2/11/14	
MATERIAL AISI 17-4PH, H1150, PER AMS 5843				ENGINEER APPROVAL: O CORNELIUS		DATE: 2/12/14	
FINISH ELECTROPOLISH PER ASTM B912				ESTIMATED WEIGHT: 0.005 Lbs		SIZE: B	
DRAWING FILE NAME: 500-302051						SCALE: 1:1	
MODEL FILE NAME: 500-302051						DRAWING NO. 500-302051	
TITLE PIN, STRUT MOUNT						REV IR	

13340 N.E. Whitaker Way
Portland, Oregon 97230
Ph. 503.257.3511



Steven Drouin

From: Steven Drouin
Sent: Thursday, July 16, 2020 2:38 PM
To: Nicholas Whitaker
Cc: John Luecke; Rudy Ortega
Subject: RE: 500-302051

I will scrap the Scratched part and proceed with the other parts

Thank you
Steven

From: Nicholas Whitaker <nwhitaker@dartaero.com>
Sent: Thursday, July 16, 2020 2:33 PM
To: Steven Drouin <sdrouin@dartaero.com>
Cc: John Luecke <jluecke@dartaero.com>; Rudy Ortega <rortega@dartaero.com>
Subject: RE: 500-302051

Steven,

We can accept the parts that are .0001--.0002 OOT. We cannot accept the scratched part and ask that you remake the part.

Thanks,

Nick Whitaker
Lead Sustaining Engineer

From: Steven Drouin <sdrouin@dartaero.com>
Sent: Thursday, July 16, 2020 11:11 AM
To: Nicholas Whitaker <nwhitaker@dartaero.com>
Cc: John Luecke <jluecke@dartaero.com>
Subject: RE: 500-302051

Nicholas

Here's a picture of the scratch

Steven

From: Nicholas Whitaker <nwhitaker@dartaero.com>

Sent: Thursday, July 16, 2020 1:58 PM

To: Steven Drouin <sdrouin@dartaero.com>

Cc: John Luecke <jluecke@dartaero.com>

Subject: RE: 500-302051

Steven,

Can you please send over a photo of the scratch?

Thanks,

Nick Whitaker

Lead Sustaining Engineer

SIMPLEX a company of

DART AEROSPACE

M 1 503 257-3511

T 1 503 280-4475

1 800 556-4166

www.dartaerospace.com



From: Steven Drouin <sdrouin@dartaero.com>

Sent: Thursday, July 16, 2020 10:52 AM

To: Nicholas Whitaker <nwhitaker@dartaero.com>

Cc: John Luecke <jluecke@dartaero.com>

Subject: 500-302051

Hi Nicholas and John

Quality came to see me with a small issue , could you let me know if this is acceptable per simplex quality standard to processed ?(see attached)

If you need more information let me know

Thank you

Steven

Entered: 26Date: DEC 14 2020NCR No. 20-8776/20-8777

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only ☐

Job: <u>210427</u> Part No. <u>500-302051-001</u>		DISPOSITION Rework ☐ Scrap ☒ Use-as-is ☒		DEPARTMENT/PROCESS Skid-tube ☐ Machining ☒ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☒ Water Jet ☐ Supplier ☐ Quality ☐																														
Date: <u>July 15th 2020</u>		Sequence #: <u>QC 6</u>		QTY Affected: <u>2 pcs out of 3</u>		MRB (QSI042) <u>51</u> 9-89 <u>20/07/18</u>																												
Description Work Order Deviation				Disposition		Completed By																												
DURING INSPECTION IT WAS FOUND THAT THE DIMENSION OF THE PIN .250-.245 IS MEASURED .2448-.2449 AT SOME PLACES (NOT ON FULL LENGTH). ALSO ONE OF THE PARTS HAS A .200 LONG SCRATCH ON SURFACE, NOT DEEP BUT STILL APPARENT.				<u>Part with 0.001 and 0.002 of tolerance are acceptable</u> <u>Part with scrap surface scratch we will scrap</u>		DAS <u>82</u> 9-89 <u>0702 2 1 7 2020</u>																												
						Lead hand / Supervisor																												
						<u>mf</u> <u>20/08/18</u>																												
						QC / QA Coordinator																												
						DAS <u>55</u> 9-89 <u>SEP 17 2020</u>																												
Root Cause Operator ☒ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Preservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY <table border="0"> <tr> <td>☐ Pressure/Forced</td> <td>☐ Contamination</td> <td>☐ Power Loss/Surge</td> <td>☐ Positioned Wrong</td> </tr> <tr> <td>☐ Bending</td> <td>☐ Misaligned/off center</td> <td>☐ Folio/Program</td> <td>☐ Outside Tolerance</td> </tr> <tr> <td>☐ Crushing</td> <td>☐ BOM/Route</td> <td>☐ Grain Direction</td> <td>☐ Drawing</td> </tr> <tr> <td>☐ Cracks</td> <td>☐ Broken/Damage/Defect</td> <td>☐ Weld</td> <td>☐ Finish</td> </tr> <tr> <td>☐ Crimp/Kink/Ripple/Wave/Twist</td> <td>☐ Incomplete/Unclear Instructions</td> <td>☐ Wrong Stock Pulled</td> <td>☐ Part Lost/Missing</td> </tr> <tr> <td>☒ Marks/Chatter</td> <td>☐ Drill Holes</td> <td>☐ Out of Sequence</td> <td>☐ Misread</td> </tr> <tr> <td>☐ Mislabeled</td> <td>☐ Fit/Function</td> <td>☐ Off-set/Set-up</td> <td></td> </tr> </table>					☐ Pressure/Forced	☐ Contamination	☐ Power Loss/Surge	☐ Positioned Wrong	☐ Bending	☐ Misaligned/off center	☐ Folio/Program	☐ Outside Tolerance	☐ Crushing	☐ BOM/Route	☐ Grain Direction	☐ Drawing	☐ Cracks	☐ Broken/Damage/Defect	☐ Weld	☐ Finish	☐ Crimp/Kink/Ripple/Wave/Twist	☐ Incomplete/Unclear Instructions	☐ Wrong Stock Pulled	☐ Part Lost/Missing	☒ Marks/Chatter	☐ Drill Holes	☐ Out of Sequence	☐ Misread	☐ Mislabeled	☐ Fit/Function	☐ Off-set/Set-up	
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